



ELSEVIER

Materials Characterization 51 (2003) 353–355

**MATERIALS
CHARACTERIZATION**

Author index to volumes 50 and 51

ACHETE, CA, 50:109
ALAYO, MI, 50:149, 50:161, 50:167
ALBERTIN, KF, 50:149
ALVES JR., S, 50:109
ANGELES-CHAVEZ, C, 51:309
ANZEL, I, 51:185
ARAUJO, ES, 50:245
ARGIOLAS, N, 51:177
ARIAS, JL, 50:189
ASENSIO, J, 50:81
AVILA, AF, 50:281
BAIERLE, RJ, 50:183
BAZZAN, M, 51:177
BERNARDI, A, 51:177
BERTOCHI, MAZ, 50:227
BOSE, WW, 51:159
BRADLEY, S, 51:101
BRANDL, AL, 50:117
BRUNCKO, M, 51:185
BUENO, LA, 50:101
BURŠÍK, J, 51:35
CAMURRI, C, 51:171
CARIDE, AO, 50:173
CARILLO, E, 51:285
CARRASCO, C, 51:171
CARREÑO, C, 51:219
CASALES, M, 51:309
CASOLCO, SR, 51:63
CASTILLO-GUERRA, R, 50:23
CASTILLO-RIVAS, V, 50:349
CERJAK, H, 51:341
CHAKRAVARTY, I, 51:235
CHATTERJEE, S, 50:305
CHEUNG, N, 50:249, 51:301
CILENSE, M, 50:217
CIOFFI, MOH, 50:209
CIUFFI, KJ, 50:101
COLÁS, R, 51:21, 51:95
CRIADO, D, 50:167
CWAJNA, J, 51:69, 51:87
CYBO, J, 51:79, 51:87
DA ROCHA, NCC, 50:203
DA SILVA, AJR, 50:183
DA SILVA, EF, 50:109
DA SILVA JR., EF, 50:127
DAS, S, 50:305
DAVIES, CHJ, 51:293
DAVIS, G, 51:147
DE AGUIAR, FM, 50:131
DE AZEVEDO, WM, 50:127, 50:245, 50:131
DE BARROS, RA, 50:131
DE LIMA, OJ, 50:101
DE MELO, CP, 50:223
DE OLIVEIRA, HP, 50:223
DE VASCONCELOS, EA, 50:127
DENARDIN, JC, 50:117
DIMMLER, G, 51:341
DINIZ, JA, 50:135
DOI, I, 50:135
DOS SANTOS, CG, 50:223
DOS SANTOS, MVB, 50:223
DZUBINSKY, M, 51:109
ESPINOZA MEDINA, MA, 51:309
FAGAN, SB, 50:183
FARHAT, ZN, 51:117
FARIA, ACA, 50:281
FAULKNER, RG, 51:49
FAZZIO, A, 50:183
FENG, JC, 50:87
FERNÁNDEZ, MS, 50:189
FERNÁNDEZ-LIMA, F, 50:155
FERNANDES, M, 51:301
FREIRE JR., FL, 50:155
GALINDO, H, 50:255
GAMEIRO, CG, 50:109
GARCIA, A, 50:249, 51:301
GARCIA-GUINEA, J, 50:59
GENG, H, 51:29
GHOSH, A, 50:305
GIBSON, JM, 51:101
GOKHALE, AM, 50:69
GONZÁLEZ, AHM, 50:233, 50:239
GONZÁLEZ-BALLESTEROS, R, 50:349
GONZALEZ-RODRIGUEZ, JG, 51:309
GRACIA, M, 50:59
GUARDIAN, R, 51:309
GUERRERO-MATA, MP, 51:95
GUPTA, SP, 51:235, 51:243
GURRAPPÀ, I, 51:131
GUSEVSKAYA, EV, 50:95
HARO, S, 51:21
HE, P, 50:87
HE, SY, 50:275
HOFFMANN, P, 50:255
HOFFMEISTER, BK, 50:317
HUANG, W, 51:1
IERARDI, MCF, 50:249
IPOHORSKI, M, 50:23
IZQUIERDO, G, 51:309
JAIN, M, 51:243
JIANG, H, 51:1
JAMIESON, AM, 50:325
JUUL JENSEN, D, 51:271

KHOURY, HJ, 50:127
 KIM, KH, 50:31
 KLOC, L, 51:35
 KNOBEL, M, 50:117
 KONOPKA, K, 51:335
 KOVAC, F, 51:109
 KOZESCHNIK, E, 51:341
 KRIZMAN, A, 51:185
 KROUPA, A, 51:35
 KUCHAŘOVÁ, K, 51:35
 KUMAR, A, 51:225
 KUMAR, S, 50:317
 KURZYDŁOWSKI, KJ, 51:141, 335

LARANJEIRA, JMG, 50:127
 LARSEN, AW, 51:271
 LAWLEY, A, 51:315
 LI, M, 51:1
 LI, X, 51:1
 LIDDELL, CM, 50:69
 LIMA PACHECO, AP, 50:245
 LIU, Y, 50:275
 LÓPEZ-ARCE, P, 50:59
 LOSBY, J, 50:317
 LU, H, 51:293
 LU, Y, 51:1
 LUO, ZP, 50:51
 LUPO, MI, 50:23

MACHADO, M, 50:179
 MAIER, P, 51:49
 MAJ, M, 51:335
 MANIVANNAN, A, 51:329
 MARCU PUSCAS, T, 50:1
 MARTYAK, NM, 50:269
 MAVROPOULOS, E, 50:203
 MAZZOLDI, P, 51:177
 MELLOR, BG, 51:285
 MENDOZA, E, 51:21
 MESSADDEQ, Y, 50:101
 MISHRA, SR, 50:317
 MOHALLEM, NDS, 50:95
 MOLINARI, A, 50:1
 MOLLEDA, F, 51:285
 MOLLEDA, FJ, 51:285
 MONTEIRO, FJ, 50:197
 MORA, J, 51:285
 MORALES, EH, 51:329

MOREIRA, JC, 50:203
 MOTA, R, 50:179, 50:183
 MOTA, RP, 50:209
 MOURE, GT, 50:203
 MURALI, S, 50:39
 MURPHY, TF, 51:315

NASSAR, EJ, 50:101
 NEGRETE-SÁNCHEZ, J, 51:63
 NERI, MA, 51:219
 NUNES, DL, 50:95
 NUNES, VB, 50:173

OBIS, J, 50:59
 OČENÁŠEK, V, 51:11
 OLIVEIRA, RAR, 50:161
 ORTIZ, M, 51:171
 OVEJERO-GARCÍA, J, 50:23

PAPACÍDERO, AT, 50:101
 PARK, A, 50:317
 PAULIN, A, 51:205
 PEDRERO, E, 50:155
 PELCOVÁ, J, 51:11
 PEREYRA, I, 50:149, 50:161,
 50:167
 PERO-SANZ, JA, 50:11, 50:81
 PINTO, MA, 50:249
 PIQUINI, P, 50:179
 PIRES, JC, 51:301
 PRADO DA SILVA, MH, 50:197
 PRIETO, P, 50:255
 PRIOLI, R, 50:155, 50:173

QIAN, YY, 50:87
 QUEIROZ, AC, 50:197

RAMÍREZ, C, 51:21
 RAO, PR, 50:305
 RHO, J, 50:317
 RIBEIRO, M, 50:161
 RIBEIRO, SJL, 50:101
 RICHTER, J, 50:339
 RIES, A, 50:217, 50:239
 RINCÓN, C, 50:255
 RIVAS, AMF, 50:173
 ROBLES-DUTENHEFNER, PA, 50:95

ROCHA, LA, 50:101
 RODRIGUES, PCM, 50:281
 RODRÍGUEZ, J, 51:21, 51:95
 ROSKOSZ, S, 51:69, 51:87
 ROSSI, AM, 50:203

SACCO, HC, 50:101
 SADA, C, 51:177
 SALES, LS, 50:95
 SÁNCHEZ, FH, 50:123
 SANCHO, JP, 50:11
 SANTA-CRUZ, PA, 50:109
 SANTOS, DB, 50:281
 SANTOS, JD, 50:197
 SATHUPUNYA, M, 50:325
 SAVAŞCAN, T, 51:259
 SEEHRA, MS, 51:329
 SEN, S, 50:261
 SEN, U, 50:261
 SHIM, KB, 50:31
 SIDOR, Y, 51:109
 SIGNORINI, M, 50:1
 SIMĀO, RA, 50:109
 SIMÕES, AZ, 50:217, 50:233,
 50:239
 SINGH, N, 51:225
 SINGH, V, 51:225
 SIVAPRASAD, P, 51:293
 SKLENIČKA, V, 51:35
 SMOLA, B, 51:11
 SOARES, GA, 50:203
 SOCOLOVSKY, LM, 50:117, 50:123
 SONG, G-M, 50:293
 SOUSA, EMB, 50:95
 SPAGNOL, PD, 50:227
 ŠPAIĆ, S, 51:205
 SPINELLI, D, 51:159
 SRIKANTH, N, 50:39
 STACH, S, 51:79, 51:87
 STOJANOVIC, BD, 50:239
 STRAFFELINI, G, 50:1
 STULÍKOVÁ, I, 51:11
 SUASTE-GÓMEZ, E, 50:349
 SUMMERS, CJ, 50:69
 SUN, CY, 50:51
 SVOBODA, M, 51:35
 SWART, JW, 50:135
 ŚWIDERSKA-ŚRODA, A, 51:141

TARPAÑI, JR, 51:159
THANABODEEKIJ, N, 50:325
TORRES-VILLASEÑOR, G, 51:63
TURHAL, MŞ, 51:259
TRAMPUŽ-OREL, N, 51:205
UNDERWOOD, S, 51:329
VALADARES, LF, 50:227
VARELA, JA, 50:217, 50:227,
50:233, 50:239
VATH III, CJ, 50:39
VERDEJA, JI, 50:81
VERDEJA, LF, 50:11
VIGIL, E, 50:155
VOORWALD, HJC, 50:209
WANG, Y-J, 50:293
WEINERT, P, 51:341
WEJRZANOWSKI, T, 51:141
WONGKASEMJIT, S, 50:325
WU, WL, 50:275
WYRZYKOWSKI, JW, 51:141
XUE, X, 51:29
YANG, DZ, 50:275
YANG, JC, 51:101
ZAGHETE, MA, 50:217, 50:233,
50:239
ZALAR, A, 51:205
ZAMBRANO, G, 50:255
ZANETTE, SI, 50:173
ZHANG, BG, 50:87
ZHOU, Y, 50:293
ZUMETA, I, 50:155





ELSEVIER

Subject index to volumes 50 and 51

Ablation properties, 50:293
AFM, 50:155, 173
Ag–30 Cu–10 Sn, 51:235
Aging, 51:95
Al–16% Si melts, 51:29
Al–Cu alloy, 50:249
Alkoxides, 50:325
Alloy 690, 51:309
AlMg3MnCr alloy, 51:11
Al–Si eutectic alloy, 51:243
Alumina matrix, 50:101
Aluminum alloy, 51:1
Anisotropy of mechanical properties, 50:81
Annealing, 51:293
Apex, 50:179
Archaeometallurgy, 51:205
Atomic force microscopy, 50:109
Atoms, 50:179

B/Al composite, 50:51
BET, 50:217
Biodegradation, 51:147
Biomimetics, 50:189
Biomineralization, 50:189
BN nanocones, 50:179
Boride layer, 50:261
Boron-doped diamond, 51:329
Boronizing, 50:261
Box counting, 51:79
Brazing, 51:235
Brick characterisation, 50:59
Bronze, 51:205
BST, 50:217

Calcium, 50:203
Carbon black, 51:101

Cement, 50:317
Ceramic–metal composites, 51:335
Cerium, 51:29
Charpy impact testing, 51:159
Chromium steels, 50:1
Columnar grains, 50:39
Composite, 50:245, 317
Composite barrier layer, 50:87
Composite materials, 50:281
Contact angle, 50:209
Cooling rate–copper content–property relationships, 51:259
Copper ball bonding, 50:39
Copper–lithium alloys, 51:171
Corrosion, 51:131
9–12%Cr steels, 51:35
9–12% Cr steels, 51:341
Crack propagation, 51:95
Cracking, 51:21
Creep behavior, 51:35
Creep life, 51:35
Crystallization, 50:239
Curie–Weiss law, 51:329
Curing, 50:317
Cutting tools, 51:117
Czochralski technique, 51:177

Deformation, 50:275
Deformation substructures, 50:39
Degradation, 51:147
Degradation mechanism, 51:131
Densification, 50:11
Diffusion bonding, 50:87
Directional solidification, 51:185
Dissolution, 50:197, 203
DTA, 50:59

Dual analysis, 50:281
Dynamic fracture toughness, 51:159

EBSD, 51:293
EBSP, 51:271
EDS, 50:305
Electrical conductivity, 51:329
Electrical impedance, 50:223
Electrical properties, 50:239
Electrical resistance and temperature, 51:185
Electrical resistivity, 51:171
Electrical resistometry, 51:11
Electrodeposition, 50:269
Electron backscattered diffraction, 51:293
Electron microscopy, 50:23
Energetics, 50:183
Etching process, 51:177

Fabrication, 50:189
Failure analysis, 51:21, 219
Fe–Cu granular alloys, 50:123
Ferritic steels, 50:81
Ferroelectric ceramic, 50:349
Ferroelectric domain, 51:177
Ferroelectric thin films, 50:227
Fine pearlite, 51:219
Fly ash, 50:317
Fractal, 51:79, 87
Fractal dimension, 51:79, 87
Fracture, 51:79, 87
Fracture toughness, 50:261; 51:335
FTIR, 50:255

GaAs substrate, 50:135
 Galvanizing, 50:269
 Gamma radiation, 50:245
 Giant Hall effect, 50:117
 Glass-reinforced hydroxyapatite, 50:197
 Grain boundary segregation, 51:49
 Hard coatings, 50:255
 Hard facing, 51:95
 Hardness, 50:249, 261
 Heat-resistant alloys, 51:21
 Heat treatment, 50:101
 Heritage, 50:59
 Heterogeneous catalyst, 50:95
 HIC susceptibility, 50:81
 High-speed machining, 51:117
 High temperature, 50:11
 Historical buildings, 50:59
 Homogeneity, 51:141
 Humidity sensor, 50:325
 Hydrogen content, 51:29
 Hydroxides, 50:11
 Hydroxyapatite, 50:197, 203
 Image analysis, 50:1; 51:141, 341
 Industrial applications, 51:131
 Infrared, 50:255
 Insulators, 50:135
 Interface, 50:51
 Intergranular corrosion, 51:309
 Intermetallic compounds, 51:235, 243
 Intermetallics, 51:141
 Intermetallic TiAl, 50:87
 Ionizing radiation, 50:127
 Isochronal annealing, 51:11
 Joint characterisation, 51:285
 Lanthanide β -diketonate complexes nanofilms, 50:109
 Lanthanum, 50:31
 Laser surface melting, 50:249
 Late Bronze Age, 51:205
 Laves phase, 51:341
 LiNbO₃, 50:239
 Line scans, 51:271
 LiTaO₃, 50:233
 Lithium niobate, 51:177
 Low C HSLA steels, 50:81
 Low cycle fatigue, 51:225
 LSGRAINS, 51:271
 Machinability, 51:219
 Macro-mechanics, 50:281
 Magnetic properties, 50:117
 Manganese, 51:49
 Materials characterisation, 51:285
 Material tests, 51:285
 Mechanical properties, 51:1, 109, 171
 Mechanical strength, 51:147
 Metallography, 51:205, 315
 Metals, 51:271
 MgAl₂O₄, 50:325
 Micro-mechanics, 50:281
 Microstructural changes, 51:35
 Microstructural evolution, 51:1
 Microstructure, 50:31, 217, 249, 275; 51:21, 109, 171, 219, 335
 Microstructure-creep property, 51:35
 Microstructure evolution, 51:309
 Microstructure-properties relations, 50:339
 Modeling of microstructure, 51:35
 Morphology, 50:1
 MOS capacitors, 50:149
 Mössbauer effect, 50:123
 Mössbauer spectroscopy, 50:59
 MTS, 50:123
 Multifractal, 51:79, 87
 Multifractal spectrum, 51:79, 87
 Nanocomposites, 50:95
 Nanodosimetric devices, 50:109
 Nanofilms, 50:127
 Ni-Al-Si ternary system, 51:243
 Nonledeburitic high-speed steels, 50:339
 Nonmetallic inclusions, 51:301
 Nonoriented electrical steels, 51:109
 Oblate morphology, 51:101
 Optical microscopy, 50:23
 Optical polarising microscope, 50:59
 Paleoindicator, 50:59
 Pb-Sn alloy, 51:185
 Pearlitic nodular iron, 51:219
 Pechini, 50:217
 PECVD, 50:161
 Pendants, 51:205
 Periodic poling, 51:177
 PET/PMMA composite, 50:209
 Phosphorus, 51:49
 Photoluminescence, 50:161
 Photonic crystal application, 50:69
 Photopolymerization, 50:131
 Plasma-enhanced chemical vapor deposition, 50:149, 167
 Plasma treatment, 50:209
 PMN-PT thin films, 50:227
 PMN thin films, 50:227
 Poly(acrylic acid), 50:245
 Polyaniline, 50:131, 245
 Polyethylene, 51:147
 Polymer, 50:127, 131; 51:147
 Polymeric precursor, 50:217, 233
 Polypyrrole (PPY), 50:223
 Polyvinyl alcohol (PVA), 50:223
 Powder metallurgy materials, 51:315
 Profile, 51:79, 87
 Pure Ni, 51:243
 Pyroelectric ceramic, 50:349
 Pyroelectricity, 50:349
 Quantitative description, 51:141
 Quantitative fractography, 51:69, 159
 Radiography, 51:285
 Rare-earth elements, 50:349
 Raw material provenance, 50:59
 RBS, 50:155
 Recrystallization, 51:271, 293
 Rheology, 50:325

Scanning electron microscope (SEM), 50:51
Scanning electron microscopy, 51:147
SEM, 50:59, 155; 51:341
SEM/EDS, 51:301
Semisolid state, 51:1
Sensitization, 51:309
Sensor, 50:127
Silicon clusters, 50:161
Silicon-doped carbon nanotubes, 50:183
Silicon nitride, 50:11, 167
Silicon oxynitride, 50:149, 161, 167
Silver wire, 50:131
Sintered carbides, 51:69
Sintering, 51:315
Sintering aids, 50:11
Sintering behavior, 50:31
 SiO_2 , 50:117
 SiO_xN_y , 50:135
Slip bands, 50:39
Soldering, 51:285
Sol-gel, 50:101
Sol-gel, Co-SiO₂, 50:95
Sol-gel processes, 50:325
Spark plasma sintering, 50:31
Specimen, 50:1
Specimen preparation, 51:341
Speisses, 51:205
Stainless steel, 51:95
Starch, 51:147
Steam valve stem, 50:23
Steel, 50:305
Steel refining, 51:301
Stereological methods, 50:69
Stiffness, 50:173
Stretch zone width, 51:159
Structural properties, 50:183
Superplasticity, 51:63
Supported nanoparticles, 51:101
Surface preparation, 51:285
Surface roughness, 50:269
TEM, 50:305
Temperature, 50:1
Tensile fracture, 50:51
Tensile strength, 50:209
Thermal embrittlement, 51:159
Thermal history, 51:49
Thermal treatment, 50:227
Thin film, 50:173
Thin films, 50:233
Ti alloy IMI 834, 51:225
 Ti_3Al precipitates, 51:225
Ti-6Al-4V alloy, 50:275
 TiO_2 film, 50:155
Titanium alloy, 51:131
Titanium carbide, 50:293
Tool steel, 50:261
Tough ceramics, 50:11
Transition metal, 50:95
Tungsten carbide, 50:255
Tungsten composite, 50:293
Ultrasonic wire bonding, 50:39
Ultrasound, 50:317
UV photodegradation, 50:109
Viscosity, 51:29
WC phase, 51:69
WC-TiC-Co, 51:117
Wear, 50:275
Wear mechanisms, 51:117
Wear resistance, 50:339
Welding, 51:21
Weld microstructure, 51:49
XRD, 50:59
Zinc-aluminium-copper alloys, 51:259
Zirconium carbide, 50:293
 Zn-Al-Ag , 51:63
 Zn-Al -based alloys, 51:63
 ZnS clusters, 50:69
 $\text{ZrB}_2\text{-ZrC}$ composite, 50:31



